# Succinic acid, 2-naphthylmethyl 2-octyl ester

**Inchi:** InChI=1S/C23H30O4/c1-3-4-5-6-9-18(2)27-23(25)15-14-22(24)26-17-19-12-13-20-10-7-8
**InchiKey:** QBKBHLPBVCMUNE-UHFFFAOYSA-N
**Formula:** C23H30O4
**SMILES:** CCCCCCC(C)OC(=O)CCC(=O)OCc1ccc2ccccc2c1
**Mol. weight [g/mol]:** 370.48

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -118.07 | kJ/mol | Joback Method |
| hf | -596.80 | kJ/mol | Joback Method |
| hfus | 48.05 | kJ/mol | Joback Method |
| hvap | 89.29 | kJ/mol | Joback Method |
| log10ws | -7.02 | | Crippen Method |
| logp | 5.565 | | Crippen Method |
| mcvol | 306.590 | ml/mol | McGowan Method |
| pc | 1308.01 | kPa | Joback Method |
| rinpol | 2790.00 | | NIST Webbook |
| tb | 928.42 | K | Joback Method |
| tc | 1144.91 | K | Joback Method |
| tf | 549.93 | K | Joback Method |
| vc | 1.179 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 980.12 | J/mol×K | 928.42 | Joback Method |
| cpg | 995.32 | J/mol×K | 964.50 | Joback Method |
| cpg | 1009.37 | J/mol×K | 1000.58 | Joback Method |
| cpg | 1022.31 | J/mol×K | 1036.67 | Joback Method |
| cpg | 1034.21 | J/mol×K | 1072.75 | Joback Method |
| cpg | 1045.12 | J/mol×K | 1108.83 | Joback Method |
| cpg | 1055.12 | J/mol×K | 1144.91 | Joback Method |
| dvisc | 0.0005856 | Pa×s | 549.93 | Joback Method |
| dvisc | 0.0003381 | Pa×s | 613.01 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0002163 | Pa×s | 676.09 | Joback Method |
| dvisc | 0.0001493 | Pa×s | 739.17 | Joback Method |
| dvisc | 0.0001093 | Pa×s | 802.26 | Joback Method |
| dvisc | 0.0000837 | Pa×s | 865.34 | Joback Method |
| dvisc | 0.0000665 | Pa×s | 928.42 | Joback Method |

# Sources

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|---|---|
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U370984&Units=SI |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |